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10/824,386	04/15/2004	Sun-Chung Chen	4006-288	6630
53720	7590	10/18/2007		
YING CHEN			EXAMINER	
Chen Yoshimura LLP			FRANKLIN, RICHARD B	
255 S. GRAND AVE.				
# 215			ART UNIT	
LOS ANGELES, CA 90012			PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary

Application No.

10/824,386

Applicant(s)

CHEN, SUN-CHUNG

Examiner

Richard Franklin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1 – 18 are pending.

Response to Arguments

2. Applicant's arguments filed 16 August 2007 have been fully considered but they are not persuasive.

Applicant has argued that the newly amended claims are not taught by the relied upon reference, US Patent Application Publication No. 2005/0052465 (hereinafter Moore). Applicant argues that Moore does not teach local electrical signals from different first interfaces are for manipulating different local or remote computers. However, the Examiner respectfully disagrees. Moore teaches different interfaces connected to different peripherals (Moore; Figure 2 Items 118, 120, 128, and 130). These peripherals are for manipulating different local or remote computers (Moore; Figure 2 Items 102 and 104). Therefore, Moore teaches the claimed limitation.

Applicant also argues that Moore does not teach at least some data sections of a network packet corresponding to the local electrical signals received by the first interfaces. However, the Examiner again respectfully disagrees. Moore teaches using wireless communications protocol (802.11a) to interconnect the two KVM switches (Moore; Figure 2 Item 134, Paragraph [0021]). Moore also teaches the two KVMs communicate electrical signals with each other (Moore; Paragraph [0023]). Communications using the 802.11a communications protocol use a frame format, which has a specific area for data. "Computer Networking: A Top-Down Approach Featuring

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the Internet” by James F. Kurose and Keith W. Ross (hereinafter Computer Networking)

shows an image of an 802.11 frame (Computer Networking; Page 523 Figure 6.11).

Therefore, in order for the two KVMs to communicate mouse and keyboard signals using 802.11a, they must use the payload section of the 802.11a frame to send the keyboard and mouse signals.

Please note the reliance on Computer Networking is to show the 802.11a protocol inherently uses packets with a payload section. Reliance upon the Computer Networking reference is not intended to be or suggest a rejection under 35 USC 103(a).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3 – 5, 8 – 11, 14 – 15, and 17 – 18 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Application Publication No. 2005/0052465 (hereinafter Moore).

As per claims 1 and 11, Moore teaches a KVM switch for which remote and local computers share remote and local manipulating devices, the KVM switch (Moore; Figure 2 Item 116) comprising a plurality of first interfaces (Moore; Figure 2 Items PS2),

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which connect to the local manipulating devices (Moore; Figure 2 Items 118, 120, 128, and 130) to receive a plurality of local electrical signals (Moore; Paragraph [0022] Lines 1 – 4), wherein local electrical signals from different first interfaces are for manipulating different local or remote computers (See Response to Arguments above); a plurality of second interfaces, which connects to the local computer (Moore; Figure 2 Item 102); a packet encoding device (Moore; Figure 2 Item 116), which generates at least one network packet having a plurality of data sections, at least some data sections of a same network packet corresponding to the local electrical signals received by the first interfaces (Moore; Paragraph [0023], See Response to Arguments above); a network device (Moore; Figure 3 Item 146), which communicates with the network device (Moore; Figure 5 Item 162) of another KVM switch (Moore; Figure 2 Item 126) using a network protocol (Moore; Paragraph [0021]) in order to transmit the network packet and to receive a network packet transmitted from the another KVM switch (Moore; Paragraph [0024] Lines 9 – 12); a packet decoding device (Moore; Figure 2 Item 116), which obtains at least one remote electrical signal from the network packet of the another KVM switch (Moore; Paragraph [0023]); and a switch device (Moore; Figure 2 Item 116), which transmits the local and remote electrical signals to the second interfaces and the packet encoding device according to a path selection setting (Moore; Paragraph [0125] Lines 12 – 18) and Paragraph [0136] Lines 3 – 5).

As per claim 3, Moore also teaches wherein the local electrical signals contain a keyboard signal and a mouse signal (Moore; Figure 2 Items 118 and 120, Paragraph [0022] Lines 1 – 4).

As per claims 4 and 15, Moore also teaches wherein the network device contains a network card (Moore; Figure 3 Item 146) which connects to the packet encoding and decoding device (Moore; Figure 3 Item 138); and a first port (Moore; Figure 3 [link between Items 144 and 146]), and a plurality of wireless ports (Moore; Paragraph [0134] Lines 5 – 11), one of which connects to the other KVM switch (Moore; Figure 2 Item 134).

As per claim 5, Moore also teaches wherein the network device connects to either one remote KVM (Moore; Figure 2), or is switched to connect to multiple remote KVMs (Moore; Paragraph [0134]) using a network capable of broadcasting.

As per claims 8 – 10, Moore also teaches wherein the packet encoding and decoding device and switch contains a CPU (Moore; Figure 3 Item 142).

As per claim 14, Moore also teaches wherein the keyboard and mouse signals are sent at the same time to the remote KVM switch (Moore; Paragraph [0023]).

As per claim 17, Moore also teaches wherein the network packet transmitted to other KVM switches uses a CPU to perform encoding and decoding (Moore; Figure 5 Item 158, Paragraphs [0035] – [0036]).

As per claim 18, Moore also teaches wherein the paths of the local and remote electrical signals are switched by a CPU according to a path selection setting (Moore; Paragraph [0125] Lines 12 – 18) and Paragraph [0136] Lines 3 – 5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication No. 2005/0052465 (hereinafter Moore) in view of US Patent No. 6,567,869 (hereinafter Shirley).

As per claims 2 and 12, Moore teaches the system and method as described per claims 1 and 11 (See rejection of claims 1 and 11 above).

Moore does not teach wherein the network packet has a network overhead section.

However, Shirley teaches a KVM switch that communicated using packets. The packets have a header section (Shirley; Col 3 Lines 19 – 24).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Moore to include the network overhead section because doing so allows for identification of the recipient of the communication (Shirley; Col 3 Lines 19 - 24).

5. Claims 6 – 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication No. 2005/0052465 (hereinafter Moore) in view of the Examiner's taking of Official Notice.

As per claims 6 – 7 and 16, Moore teaches the system and method as described per claims 1 and 11 (See rejection of claim 1 and 11 above).

Moore does not explicitly teach wherein the interfaces contain UART's and a half-duplex processor.

However, the Examiner has taken Official Notice that UART's and half-duplex communications are well known in the art of data communications.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Moore to include the UART's and half-duplex communications because doing so allows the KVM to communicate with the attached peripherals and computers.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

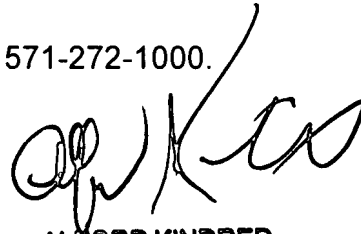
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Franklin whose telephone number is (571) 272-0669. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alford Kindred can be reached on (571) 272-4037. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Richard Franklin
Patent Examiner
Art Unit 2181



ALFORD KINDRED
PRIMARY EXAMINER